We claim:

1. A method for measuring the presence or concentration of an analyte in a sample by spectrophotometry, comprising:

providing an open top cuvette having a sample with an analyte to be measured;

providing a light source and a detector for detecting emitted light;

taking at least two measurements that includes:

(i) directing at least two beams of light from the light source to different locations on the cuvette;

(ii) passing the at least two beams through the cuvette at their respective locations and through the sample to be measured; and

(iii) measuring at least two respective emitted light beams with the detector; and

comparing the at least two emitted light beams to determine if: all the emitted light beams should be disregarded; one or more of the emitted light beams should be disregarded; or the sample absorbances should be averaged.

2. A method for measuring as claimed in claim 1, further comprising taking at least three measurements and comparing the at least three emitted light beams to determine if: all the emitted light beams should be disregarded; one or more of the emitted light beams should be disregarded; or the emitted light beams should be averaged.

3. A method for measuring as claimed in claim 1, wherein the spectrophotometry is fluorescence spectrophotometry.

4. A method for measuring as claimed in claim 1, wherein the spectrophotometry is absorption spectrophotometry and the step of taking at least two measurements includes:

(i) directing at least two beams from the lights source to different locations on the cuvette;

(ii) passing the at least two beams through the cuvette at their respective locations and through the sample to be measured; and

(iii) measuring at least two respective sample absorbances from the emitted light corresponding to the at least two beams with the detector; and

comparing the at least two sample absorbances to determine if: all the sample absorbances should be disregarded; one or more of the sample absorbances should be disregarded; or the sample absorbances should be averaged.

5. A method for measuring as claimed in claim 1, wherein a single light source and a single detector are provided and the cuvette is moved relative to the light source and cuvette to produce the at least two beams of light.

6. A method for measuring as claimed in claim 4, wherein prior to the step of directing at least two beams, the method further comprises:

(i) directing at least two beams of light from the light source at their respective different locations on the cuvette;

(ii) passing the at least two beams through the cuvette alone or the cuvette and sample before the sample has reacted with reagents; and

(iii) measuring at least two respective blank absorbances from the emitted light corresponding to the at least two beams with the detector; and

selecting at least one blank absorbance; and

subtracting at least one blank absorbance from the at least two sample absorbances to result in corrected sample absorbances.

7. A method for measuring as claimed in claim 6, wherein a single light source and a single detector are provided and the cuvette is moved relative to the light source and cuvette to produce the at least two beams of light.

8. A method for measuring as claimed in claim 6, wherein all blank absorbances are selected and each blank absorbance is subtracted from its corresponding sample absorbance at the same location.

9. A method for measuring as claimed in claim 6, wherein the lowest blank absorbance is selected and the lowest blank absorbance is subtracted from each sample absorbance.

10. A method for measuring as claimed in claim 4, wherein after a period of time after the at least two measurements, the method further comprises:

taking at least two second measurements at the same location as the at least two measurements to result in at least two second sample absorbances;

subtracting the at least two sample absorbances from the second sample absorbances to result in a rate sample absorbance.

11. A method for measuring as claimed in claim 4, wherein the comparison includes comparing the sample absorbances with each other, and if a difference in absorbance between any two absorbances exceeds a predetermined absorbance, then disregarding all sample absorbances.

12. A method for measuring as claimed in claim 4, wherein the comparison includes comparing the sample absorbances with each other:

if a difference in absorbance between all absorbances exceeds a predetermined absorbance, then disregarding all sample absorbances;

if the difference between a predetermined number of absorbances, which is less than the total number of absorbances, is within the predetermined absorbance, then discarding the remaining absorbances and averaging the absorbances of the predetermined number of absorbances.

13. A method for measuring as claimed in claim 6, wherein the comparison includes comparing the corrected sample absorbances with each other:

if a difference in absorbance between all absorbances exceeds a predetermined absorbance, then disregarding all sample absorbances;

if the difference between a predetermined number of absorbances, which is less than the total number of absorbances, is within the predetermined absorbance, then discarding the remaining absorbances and averaging the absorbances of the predetermined number of absorbances.

14. A method for measuring as claimed in claim 6, wherein the comparison includes comparing the corrected sample absorbances with each other, and if a difference in absorbance between any two corrected sample absorbances exceeds a predetermined absorbance, then disregarding all corrected sample absorbances.

15. A method for measuring as claimed in claim 1, wherein the comparison detects errors caused by one or more interfering condition(s).

16. A method for measuring as claimed in claim 15, wherein the interfering condition(s) include air bubbles, finger prints, dirt or defects in the cuvette.

17. A method for measuring as claimed in claim 2, wherein the analysis is performed on a diagnostic analyzer.

18. A method for measuring as claimed in claim 1, wherein the light has a wavelength in the range of 300 to 1100 nm.

19. A method for measuring the presence or concentration of an analyte in a sample by absorption spectrophotometry, comprising:

providing a cuvette having a sample with an analyte to be measured;

providing a source of light and a detector for detecting the light;

taking at least three measurements that includes:

(i) directing at least three beams of the light to different locations on the cuvette;

(ii) passing the at least three beams through the cuvette at their respective locations and through the sample to be measured; and

(iii) measuring at least three respective sample absorbances of the transmitted beams with the detector; and

comparing the at least three sample absorbances to determine if: all the sample absorbances should be disregarded; one or more of the sample absorbances should be disregarded and the remaining absorbances retained; or all the sample absorbances should be averaged,

wherein: if at least two sample absorbances are retained and an average retained absorbance is less than a first selected absorbance then the lowest absorbance is used in determining the presence or concentration of the analyte; or if at least two sample absorbances are retained and an average retained absorbance is greater than or equal to a second selected absorbance then the highest absorbance is used in determining the presence or concentration of the analyte.

20. A method for measuring as claimed in claim 19, wherein a single light source and a single detector are provided and the cuvette is moved relative to the light source and cuvette to produce the at least three beams of light.

21. A method for measuring as claimed in claim 19, wherein the first and second selected absorbances are both one absorbance unit.

22. A method for measuring as claimed in claim 19, wherein the average retained absorbance is based on all sample absorbances.

23. A method for measuring as claimed in claim 19, wherein prior to the step of directing at least three beams, the method further comprises:

(i) directing at least three beams of the light at their respective different locations on the cuvette;

(ii) passing the at least three beams through the cuvette alone or the cuvette and sample before the sample has reacted with reagents; and

(iii) measuring at least three respective blank absorbances of the transmitted beams with the detector; and

selecting at least one blank absorbance; and

subtracting at least one blank absorbance from the at least three sample absorbances to result in corrected sample absorbances.

24. A method according to claim 1 implemented by a computer program interfacing with a computer.

25. An article of manufacture comprising a computer usable medium having computer readable program code configured to conduct the method of claim 1.